

## **Appendix E: Conservation and Restoration Watersheds**

### **Conservation Area Designation**

Conservation areas are the subwatersheds in which current watershed processes and conditions have resulted in natural landscape patterns. Hydrologic function, such as sediment amounts and stream flow regimes resulting from disturbances are within a natural range of frequency, duration, and intensity. Waters are meeting designated or existing beneficial uses. High quality water is common to provide both current and future public drinking water supplies. Land uses and human activities do not strongly influence landscape pattern or hydrologic function, as indicated by low road density and few stream crossings. Examples of conservation areas include wilderness and many of the roadless subwatersheds.

As a general rule minimal investment over time is needed to maintain function and critical instream and upland habitat elements in these conservation-designated watersheds.

### **Restoration Area Designation**

Restoration areas are the subwatersheds where biological and physical processes and conditions do not reflect natural patterns because of past and long-term land disturbances. These disturbances are a result of past activities such as extensive roads network, timber harvest near stream channels, stream channel changes caused by mining, and riparian damage due to unmanaged livestock grazing. The common effect of these disturbances are long-term (decades) increase of sediment deposition in streams, loss of large woody debris recruitment to stream channels, abnormal hydrologic patterns (water flows), and elevated water temperatures. Cumulative impacts from human caused disturbances and periodic natural events such as large fires, landslides, and floods exacerbate abnormal watershed and biological conditions.

Active management is required to restore the physical and biological function to their natural range of frequency, duration, and intensity. Identification and assessment of the significant adverse impacts to habitat will allow managers to focus restoration efforts in the most cost effective manner to achieve hydrologic and biological recovery. This implies that 1) there is a range of treatment intensities and desired landscape responses, and 2) not all impacts need be treated to achieve goals.

### **Priority Designations**

Primary issues considered in ranking status and risks are water quality, riparian habitat, existing aquatic species diversity, and potential fisheries habitats productivity. Opportunities considered the expected cost and response time to effect measurable changes toward achieving goals.

### **Population Strongholds**

Watersheds of value for protection of populations of federally listed and proposed aquatic species and narrow endemics (i.e. population strongholds) were ranked high priority. The intent is that strongholds will provide high quality habitat for species and support expansion and recolonization of species to adjacent watersheds. Population strongholds may be added, deleted, or modified, based on new information.

### **High Priority Criteria – Conserve Area Designation**

1. Population strongholds for federally listed and proposed aquatic species and narrow endemics, based on high genetic integrity, connectivity of subpopulations, and restoration/expansion potential into adjacent watersheds OR;
2. Fish species assemblages contribute to high biological diversity. Habitats support productive or unique populations and key salmonid species exhibit full range of life history diversity. The assumption is that the aquatic community is largely intact, and is a potential source of individuals to nearby recovering populations AND;
3. Water quality supports designated and existing beneficial uses; OR
4. Municipal (public) water supplies.

**Moderate Priority Criteria – Conserve Area Designation**

1. Fish species assemblages represent moderate biological diversity AND;
2. Water quality supports designated and existing beneficial uses.

**High Priority Criteria – Restore Area Designation**

1. Population strongholds for federally listed and proposed aquatic species and narrow endemics, based on high genetic integrity, connectivity of subpopulations, and restoration/expansion potential into adjacent watersheds OR;
2. Habitat potential for highly productive or unique fish communities with restoration efforts. Loss of connected populations, competition or genetic introgression with non-native species has caused the loss of diversity of some unique populations such as key salmonids species. The assumption is that the aquatic community is largely intact, but not resilient to landscape disturbance events, nor provides a source of individuals to nearby recovering populations AND;
3. Water quality may not support all designated and existing beneficial uses OR;
4. Municipal (public) water supply.

**Moderate Priority Criteria – Restore Area Designation**

1. Potential for moderately productive fish habitat with restoration efforts. Long-term loss of connected populations, competition or genetic introgression with non-native species has caused the loss of diversity of some unique populations such as key salmonids species. The assumption is that the aquatic community is largely intact, but not resilient to landscape disturbance events, nor provides a source of individuals to nearby recovering populations AND;
2. Water quality may not support all designated and existing beneficial uses OR;
3. Municipal (public) water use is a future possibility.

**Low Priority Criteria – Restore Area Designation**

1. There is a minor amount of fish habitat. Long-term loss of connected populations, competition or genetic introgression with non-native species has caused the loss of diversity of key salmonids species. The assumption is that the aquatic community is not intact, and not highly resilient to natural events, nor provides a source of individuals to nearby recovering populations AND;
2. Water quality may not support all designated and existing beneficial uses AND;
3. Municipal (public) water is not considered as a future use.

**Coeur d'Alene Field Office Conservation and Restoration Watersheds**

6 <sup>th</sup> Field HUC Number	Subwatershed Name	Management Objective	Priority
Little North Fork Clearwater			
170603080904	Lund Creek	Conservation	High*
	Little Lost Creek	Conservation	High*
South Fork Coeur d'Alene			
170103020501	Mainstem Pine Creek, below confluence	Restoration	Moderate
	East Fork Pine Creek	Restoration	High
	West Fork Pine Creek	Restoration	Moderate
	Highland Creek	Restoration	Moderate
	Hunter Creek	Restoration	Moderate
170103020301	West Fork Ninemile Creek	Restoration	Moderate
170103020202	Placer Creek	Restoration	High
170103020401	Rock Creek	Restoration	Moderate
Coeur d'Alene Lake			
17010303	Upper Latour Creek	Conservation	Moderate

*Appendix E. Conservation and Restoration Wetlands*

<b>6<sup>th</sup> Field HUC Number</b>	<b>Subwatershed Name</b>	<b>Management Objective</b>	<b>Priority</b>
St. Joe River			
170103040801	Rochat Creek	Conservation	Moderate

\*Population Strongholds for bull trout, as delineated in the draft Bull Trout Recovery Plan.